ABSTRACT

A multi-channel passive DWDM multiplexing module, which can be installed in a standard shelf of a patch panel, takes multiple optical signals of defined frequencies and provides a multiplexed optical output. The module simplifies greatly intraoffice fiber optical connections by situating itself adjacent where the fiber optical cables are terminated, thus eliminating fiber optical cable routing through overhead racks. The module saves inter-office fiber optical resources by providing passive DWDM multiplexing, which combines multiple optical signals into one fiber optical cable. The module further saves cost on spare parts at each central office by providing a maintenance connection that can be alternately used as a spare input connection.